BEHAVIORAL EFFECTS OF PRENATAL EXPOSURE TO THE ENDOCRINE DISRUPTOR, DIISONONYL PHTHALATE, ON ADULT RATS (Rattus norvegicus)

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Phthalates are incorporated into a wide array of products including enteric coatings on pills, lubricants, binders, glues, surfactants and other uses. However, the most widespread exposure the general public has to phthalates is through their role as a plasticizing agent present in many varieties of plastic. Several phthalate forms exist, and in the different forms, several have been shown to display endocrine disrupting properties, most notably by inducing changes in gonadal function and development. . Diisononyl phthalate (DINP) is a major plasticizing agent used in the manufacture of polyvinyl chloride (PVC) plastics. In the present work, pregnant Norway rats (*Rattus norvegicus*) were exposed daily to environmentally relevant levels of diisononyl phthalate. The pups from these females were examined at birth and their weight, anogenital statistic, ability to nurse, and righting responses were measured and compared with control populations. In adulthood, exposed and control pups were tested in elevated plus maze, rotarod, and open field tests. Results of DINP exposure are correlated with previously collected physiological and behavioral data and examined in regard to how this compound may alter success in mammalian systems.